

## CHAPTER 4

### 4. ENVIRONMENTAL CONSEQUENCES

#### 4.1. Terrestrial Ecology

##### 4.1.1. *Terrestrial Plants*

Each of the alternative routes would pass through vegetation types that are common and representative of the region. There would be less than 10 acres of forested habitat cleared for any of the alternative route segments proposed. In addition, from a state or regional perspective, no rare or uncommon plant communities were identified along any of these segments. Therefore, with respect to vegetation, any project-related impacts, including cumulative impacts to this resource, are expected to be regionally insignificant.

##### 4.1.2. *Invasive Plants Species*

Because of the previous level of disturbance to the native plant communities along the proposed routes, no impacts to such communities from the introduction or spread of invasive terrestrial plants are anticipated as a result of the proposed activities.

##### 4.1.3. *Terrestrial Animals*

Although the majority of the proposed routes consist of relatively open habitats, some woodland habitats occur near streams and river crossings. Construction of the transmission line would remove some of these woodland habitats. Clearing would result in minimal habitat fragmentation and would slightly increase the percentage of forest edge in the vicinity. Although some species prefer edge habitat, other species could be negatively affected by these habitat changes. Small animals which have relatively small home ranges or habitat area requirements or that require specific structural habitat characteristics may be negatively affected by these conditions. However, these effects are expected to be minimal because of the high amount of habitat fragmentation that already exists along the proposed routes. The proposed action would not significantly affect the population status of invasive terrestrial animals or migratory birds in the project area.

Construction of the transmission line would disturb some wildlife habitat and would likely displace, or perhaps destroy, some small animals that occur along the route. Because the majority of these areas have been disturbed by previous land use activities and because the wildlife habitats that occur along the proposed routes are common from a state or regional perspective, impacts to terrestrial animals and these habitats would be insignificant.

The preferred route and alternative route segments differ little in their potential impacts on terrestrial animals. The preferred route would involve several river crossings and the removal of riparian woodlands from within the right-of-way. The selection of other alternative route segments would have fewer river crossings, thereby reducing the area of riparian woodlands that would be cleared. However, selection of any combination of alternative route segments is not expected to result in individual or cumulative adverse effects on terrestrial animal populations in the vicinity.

## **4.2. Threatened and Endangered Species**

### **4.2.1. Terrestrial Plants**

No occurrences of listed plant species were identified along any of the proposed alternative route segments. Therefore, no impacts to rare plant species are expected from the construction of any of the alternative routes evaluated.

### **4.2.2. Terrestrial Animals**

Potential nesting habitat for the sharp-shinned hawk would be removed by the construction of the proposed transmission line. However, ample nesting habitat for this bird occurs in the surrounding area. Selection of any of the identified alternatives would increase the amount of foraging habitat for sharp-shinned hawks. Any disturbances to this species as a result of the identified alternatives are expected to be minimal and temporary and, therefore, insignificant.

Due to the absence of large tracts of mature forests and because forest habitats in the project area are highly fragmented, cerulean warblers are unlikely to be present. Therefore, no impacts to this species are anticipated as a result of the implementation of any of the alternatives.

If southeastern shrews occur within the project area, some individuals may be destroyed by construction activities as a result of the selection of any of the alternatives. Because this mammal has relatively broad habitat requirements and has a wide geographic distribution, southeastern shrew populations would not be adversely affected by the implementation of any of the alternatives.

No Federally listed terrestrial species were identified on or near identified transmission line routes, and no effect on such species is anticipated.

### **4.2.3. Aquatic Animals**

No Federally listed aquatic animals would be affected by the proposed action. Short-term impacts could potentially occur to state-listed aquatic animals during construction and maintenance activities on this proposed transmission line.

Clearing of riparian vegetation and soil disturbance associated with construction of stream crossings and other construction or maintenance activities could result in runoff entering these waterways. Impacts to Tippecanoe, smallscale, and slenderhead darters would be more likely to occur during the spawning season (late March–late July) for these fishes. Silt and other runoff could also adversely impact mussel resources in the Harpeth River.

No effect is expected on any listed Federal aquatic species. The implementation of erosion control measures as described in 4.4 Aquatic Ecology during construction and maintenance would help ensure that there would be no unacceptable impacts to state-listed aquatic animals. In addition, no impacts are expected to the viability of any aquatic species populations in the project area.

### 4.3. Wetlands

No wetlands were identified in or adjacent to any route segments; thus, there would be no individual or cumulative impacts on wetland resources as a result of the construction and maintenance of the subject transmission line right-of-way.

### 4.4. Aquatic Ecology

Aquatic life could be impacted either directly by alteration of conditions in the streambed or riparian zone, or indirectly by runoff from construction and maintenance activities along the route entering aquatic habitats. Although Alternative Route Segment A would have two fewer Harpeth River crossings than the preferred route, it could result in removal of more riparian vegetation than the eliminated crossings, because of the right-of-way width needed where Segment A closely follows the Harpeth River. The bank at the sharp bend (Baugh Bend) near the Rebel Meadows area could be difficult to stabilize if the riparian zone is removed. Alternative Segment C would have the least number of stream crossings. Although construction of the preferred route would involve more stream crossings, the impacts to aquatic life would be insignificant with implementation of the following commitments:

- All intermittent and perennial watercourse crossings would be designated as Level B, Protection of Important Permanent Streams, as outlined in Muncy (1999). This commitment restricts the cutting of trees near permanent streams to those meeting National Electric Safety Code and danger tree requirements and includes consultation with TVA biologists to minimize further the potential impact of stream crossings.
- Watercourses that convey only surface water during storm events (i.e., wet-weather conveyances or ephemeral streams) and that could be affected by the preferred project route would be protected by standard Best Management Practices (BMPs) as identified in Muncy (1999). These BMPs are designed to minimize erosion and subsequent sedimentation in streams.
- TVA stream bank stabilization experts would be consulted regarding how best to stabilize each watercourse crossing.
- TVA botanists would be consulted regarding recommendations on planting native, low-growing, deciduous and/or scrub/shrub vegetation on the stream banks to provide bank stabilization and a certain degree of canopy cover.
- TVA maintenance organization will be notified of the two previous commitments requiring consultation with TVA experts, and informed that future maintenance activities are to minimize disturbance of any stream bank stabilization components or planted vegetation. In addition, an aquatic ecologist would be requested to review future maintenance/sensitive area projects associated with the proposed line segment to help ensure that the bank stabilization and planted vegetation are not impacted by maintenance activities.
- A copy of the proposed project's Erosion and Sediment Control/BMP/Storm Water Control Plan (as discussed in Muncy, 1999) would be provided to TVA's Heritage staff one month prior to any clearing or construction activities for review.

The intention of these commitments would be to restore and maintain the riparian vegetation in a near natural state and to better stabilize existing stream banks prone to erosion. This would also further insure that incremental cumulative impacts associated with this action are insignificant.

Road access to construction sites would be planned and built to minimize erosion and sedimentation effects. If no practicable alternative exists, trees along streams within the proposed transmission line route and adjacent danger trees would be cut; however, their stumps would not be removed and short understory vegetation would be disturbed as little as possible. Maintenance activities along streams would be by mechanical cutting or by selective use of USEPA-registered herbicides. Permanent and temporary stream crossings would comply with appropriate Federal and state permitting requirements as well as any applicable designations and BMPs. Where herbicides are used, these chemicals would be applied following USEPA label restrictions and TVA BMPs.

#### **4.5. Managed Areas**

The Spencer Creek Seep Protection Planning Site and the Natchez Trace Parkway are located within 3 miles of the preferred transmission line route. Because of the distance between these areas and the proposed transmission line (1.4 to 1.5 miles), no impacts are anticipated to these areas as a result of the construction or maintenance of the line. The proposed action is not expected to adversely affect the segments of the Harpeth River that are currently classified as a State Scenic River.

#### **4.6. Recreation**

Avoidance of developed recreation facilities along the Mack Hatcher Parkway would result in insignificant effects on recreation facilities and activities. The project construction phase could cause some temporary displacement of low-density outdoor recreation activities. However, these impacts would be minor and temporary in nature. TVA's preferred route may have some impact on the conceptual plans for the golf course planned in connection with the West Haven residential subdivision development. However, golf courses can be designed to be compatible with transmission line right-of-ways and this use would not be precluded. The removal of short stretches of riparian and the construction of the transmission line crossings would have a minor impact to recreational boaters in the project area; however, the long term and cumulative impact of the project on recreation would be insignificant.

#### **4.7. Floodplains**

The proposed Aspen Grove - Bingham 161-kV Transmission Line would cross numerous floodplain areas. Under EO 11988, an overhead transmission line and the support structures are considered to be a repetitive action in the 100-year floodplain. The construction of the support structures for the transmission line would not be expected to result in any increase in flood hazard as a result of either increased flood elevations or changes in flow-carrying capacity of the streams being crossed. To minimize adverse impacts on natural and beneficial floodplain values, the rights-of-way would be revegetated where natural vegetation is removed, and the removal of unique vegetation, if any, would be avoided. BMPs would be used during construction activities.

A portion of the existing Aspen Grove Substation is located within the 100-year floodplain and floodway of Spencer Creek. This is an existing, non-Federal facility and therefore not subject to EO 11988. Some TVA equipment may be installed in this substation to facilitate connection of the proposed transmission line. There is no practical alternative to this installation since the Aspen Grove Substation is the most feasible connection point to the 161-kV system. Avoidance of the 100-year floodplain would require development of a new switching station site at some remote location and construction of additional transmission line on additional new right-of-way. To prevent an increase in flood damages, any new TVA equipment and/or facilities would be located outside of the 100-year floodway, and either located outside of the 100-year floodplain or protected to at least the 100-year flood elevation (650.0 feet above mean sea level).

#### **4.8. Groundwater**

Due to the nature of this project and the lack of sinkholes in the project area, the individual and cumulative impact on groundwater resources from this action would be insignificant. However, in order to better ensure that any groundwater impacts would be acceptable, BMPs as described in Muncy (1999), would be utilized.

#### **4.9. Surface Water**

Soil disturbances associated with access roads or other construction activities can potentially result in adverse water quality impacts. Erosion and sedimentation can clog small streams and threaten aquatic life. Removal of the tree canopy along stream crossings can result in increased water temperatures and adverse impacts to aquatic biota. Improper use of herbicides to control vegetation could result in runoff to streams and subsequent aquatic impacts.

However, TVA routinely includes precautions in the design, construction, and maintenance of its transmission line projects to minimize these potential impacts. Permanent stream crossings would be designed to not impede runoff patterns and the natural movement of aquatic fauna. Temporary stream crossings and other construction and maintenance activities would comply with appropriate state permit requirements and TVA requirements as described in Muncy (1999). Canopies in all SMZs would be left undisturbed unless there is no practicable alternative. Right-of-way maintenance would employ only USEPA-registered herbicides used in accordance with label directions designed in part to restrict applications in the vicinity of receiving waters and to prevent unacceptable aquatic impacts.

Potential surface water effects from the three alternative routes are expected to be similar and not significant. No cumulative surface water impacts are anticipated. Minor temporary impacts associated with construction and long-term right-of-way maintenance impacts would be minimized using BMPs. The preferred route involves six additional crossings of the larger streams and could involve slightly more work near the stream during construction, depending on the degree of stream bank clearing required. The effect on surface water quality, however, is not expected to be significant or measurably different from the alternative routes.

#### **4.10. Visual**

Visual consequences are examined in terms of visual changes between the existing landscape and proposed actions, sensitivity of viewing points available to the general

public, their viewing distances, and visibility of proposed changes. Scenic integrity indicates the degree of intactness or wholeness of the landscape character. These measures help identify changes in visual character based on commonly held perceptions of landscape beauty, and the aesthetic sense of place.

Visual/aesthetic impacts from the construction, operation, and maintenance of the new 161-kV transmission line would vary under each of the proposed alternative route segments. In each of the alternatives, additional poles and new locations would increase the number of adversely contrasting elements seen in the landscape and would contribute to reduced visual coherence and harmony. In order to reduce the visual impacts, the transmission line structures would be painted a dark color, thereby reducing visual contrast from the normal bright steel color typically used. Construction of any of these alternative routes would be visually insignificant.

Alternative Route Segment A may be seen by some residents of Rebel Meadows Subdivision to the west and by recreational users along the river. These views would be in the foreground (within one-half mile of the observer) and would be brief due to natural vegetative screening along the riverbank. For residents, views would be mostly between poles and under lines, similar to those currently seen along subdivision access roads. As the transmission line continues to travel south, distances increase and terrain becomes a factor in reducing the vertical profiles of new poles. The proposed transmission line poles and structures along Del Rio Pike would be visually similar to those currently seen along this section of road.

In the vicinity of Mack Hatcher Parkway, structures along the preferred route would be viewed in the foreground by passing motorists, at the existing golf course, and from an array of commercial and religious developments. Existing steel and wooden poles which currently occupy the northern portion of the right-of-way near the substation may be replaced. Replacement of the poles would utilize existing right-of-way to a great extent with minor clearing involved. Replacement of wood poles with new steel poles would provide taller structures, and would increase the vertical adverse contrast in the foreground. However, there would be potentially fewer poles, and utilizing existing right-of-way would have less of an overall impact than creating a new route.

The preferred route would cross U.S. Highway 431 and continue west near Rebel Meadows before crossing the Harpeth River three times. Similar to Alternative Route Segment A proposed for this area, recreational users along the river would have views of the proposed transmission lines. These views would be brief and under the lines as seen in the foreground.

Farther to the west, the proposed route segments traverse open pastureland. This low, flat-lying area has extensive cultivated lands and could be seen by local residents and motorists up to one-fourth mile, mainly from local minor roads and State Highway 96. Views of the proposed transmission line would be predominately in the middleground (1-4 miles), and from the few homes in the area. The proposed transmission line pole structures may provide some visual contrast with the more horizontal man-made alterations (one- to two-story homes, barns, and small silos). This contrast, however, would be insignificant when viewed from these distances.

Five minor crossings of the West Harpeth River would be required prior to reaching the new Bingham Substation near Leipers Fork. This portion of the route would be seen by

motorists along Boyd Mill Pike and several area residents. Views from the water would be minimal due to limited recreational opportunities along this portion of the river. Existing vegetation would obscure long views of the proposed transmission lines and associated structures, particularly in the area closest to the new substation that has limited vehicular access. Visual contrast with the existing landscape character in this area would be insignificant.

Alternative Route Segment C would be seen by motorists along Boyd Mill Pike in the vicinity of Glass Spring and White Cemetery. These views would be brief as a result of differences in elevation and natural vegetative screening. The proposed transmission line would parallel Boyd Mill Pike from Glass Spring and would contribute to the number of poles and structures currently seen in the landscape. However, the proposed transmission line poles would be visually similar to existing structures along the right-of-way. Alternative Route Segment C terminates near West Harpeth River along the proposed Alternative Route Segment B north of Boyd Cemetery. Visual impacts would be similar to those discussed for Alternative Route Segment B in this area.

Of the three proposed routes, Alternative Route Segment A would have the least visual impact, mainly as a result of length and location relevant to the Harpeth River. Alternative Route Segment C would have the most visual impact due to its contribution of visual discord (new poles, structures, etc.) along Boyd Mill Pike. However, none of the proposed segments, if constructed as shown, would have a significant impact on visual resources.

## **4.11. Cultural Resources**

### ***4.11.1. Archeological and Historic Sites***

An archaeological survey was conducted of the proposed alternatives in August and September of 2001. The Tennessee State Historic Preservation Officer (SHPO) concurred with TVA's recommendation that 40WM271 is the only potentially eligible archaeological site within the proposed project's APE.

Should the proposed project be carried out within the preferred Alternative Route Segment B, TVA would implement the following measures to avoid any adverse effects to site 40WM271.

- No poles or structures would be located within the boundaries of the identified archeological sites;
- If the identified archeological site must be traversed, low ground pressure type equipment would be used when soil conditions are dry and firm.
- If avoidance is not feasible, TVA would conduct an evaluation of the site to determine its NRHP status. Should the site be determined eligible, archaeological data recovery would be implemented.

Within Alternative Route Segment A, no currently listed or eligible for listing properties were identified during the Phase I archaeological survey. However, the geomorphologic survey identified portions of the route that have a very high potential for buried deposits. Should the proposed project utilize Alternative Route Segment A, these areas would be subject to further testing.

The areas within the Alternative Route Segment B that have a high to very high potential for buried deposit would be subject to further testing should pole or structure locations fall within those areas.

Within Alternative Route Segment C, none of the archaeological sites identified are eligible for listing within the NRHP.

#### **4.11.2. Historic Structures**

The historic and architectural survey identified 29 individual properties and one historic district within the project's proposed right-of-way and/or viewshed. TVA's survey report and determination of adverse effect were submitted to the Tennessee SHPO on January 24, 2003. Of these 30 identified properties, 18 are listed in the NRHP or are eligible for listing. Although 12 individual properties would be visually affected by the preferred route or its alternatives, the effects to 11 of these properties would not be adverse. One of the individual properties, WM-1150 could be adversely visually affected by Alternative Route Segment C.

Construction of the proposed transmission line on the preferred route or on the alternative routes would have an adverse effect on the Harpeth River Historic District (HRHD). TVA, in consultation with the Tennessee SHPO has agreed to develop and execute a Memorandum of Agreement (MOA) to address these adverse effects. The MOA would stipulate the development and implementation of a visual treatment plan to minimize and mitigate the visual effects both to individual contributing resources and to the agricultural characteristics for which the district is eligible. One measure to reduce the visual effects that TVA would implement is to paint the transmission line structures Franklin Green, a dark color that would allow the structures to better blend with the rural setting. Additional avoidance measures may include the following:

- The use of single pole steel structures where feasible within the boundaries of the HRHD and within the viewsheds of historic structures.
- Alterations (i.e., structure height, span distance) within the preferred TL route to minimize its effects on a sensitive area of the district, a specific historic structure, or any other contributing resource shall be implemented whenever prudent and feasible.

The HRHD would be adversely affected by the primary routing corridor as well as Alternative Route Segments A, B, and C. TVA's survey report and determination of adverse effect were submitted to the Tennessee SHPO on January 24, 2003. With the implementation of the MOA, potential impacts on cultural resources are expected to be insignificant. TVA, in consultation with the SHPO, identified no cumulative effects to historic properties as a result of the proposed project.

## **4.12. Post Construction Impacts**

### **4.12.1. Electric and Magnetic Fields**

TVA recognizes there is public concern about whether any adverse health effects are caused by electric and magnetic fields (EMF) that result from generation, transmission, distribution, and use of electricity. Many scientific research efforts and other studies



examining the potential health and other effects of EMF have been and are being done. TVA is aware of, and ensures that it stays aware of, published research and study results and directly supports some of the research and study efforts.

Studies, interpretations, and research to date are far from conclusive about potential associations between EMF and possible health impacts. A few studies have been interpreted as suggesting a weak statistical relationship between EMF and some rare forms of cancers. During the summer of 2001, the International Association for Research on Cancer reviewed available epidemiological studies and concluded that childhood leukemia appears to be associated with magnetic fields but that there was not a cause and effect relationship. It was concluded that the risk is small but may in some circumstances of higher exposure result in one type of childhood leukemia. The Association also concluded that electric fields do not have an association with cancer.

However, equal or greater numbers of similar studies show no association or cannot reproduce data interpreted as demonstrating an association. No laboratory research has found cause and effect health impacts from EMF and certainly none that are adverse. Neither has any concept of how these fields could cause health effects achieved scientific consensus.

There is also no agreement in the scientific or EMF research community as to what if any electric or magnetic field parameters might be associated with potential health effects. There are no scientifically or medically defined safe or unsafe field strengths, although state regulatory bodies in Florida and New York have established edge of right-of-way magnetic field strength limits for 230-kV and larger power transmission lines.

TVA has analyzed and continues to analyze the fields associated with its typical line designs using the best available models and has measured actual fields for a large number of locations along its transmission line easements. Both model data and measurements show that the field strengths for TVA transmission lines are well within Florida and New York limits. Based on such models, expected field strengths for the proposed lines discussed in this document would also be within those existing state guidelines.

TVA's standard location practice has the effect of minimizing continuous public exposures to transmission line EMF. The transmission line route selection team uses a constraint model that place a 300-foot radius (91.4-meter) buffer around occupied buildings, except schools, for which a 1200-foot (366-meter) buffer is used. The purpose of these buffers is to reduce potential land use conflicts with yard trees, outbuildings, and ancillary facilities and potential visual impacts as well as exposures to EMF. Though not absolute location constraints, these buffers weigh heavily in location decisions, influencing selection of route options and alignments. Because EMF diminishes quickly with distance from the conductors, the routing of transmission lines using constraint buffers effectively reduces potential continuous public exposure to EMF. Crossing under lines or otherwise being near them for short periods may increase overall EMF exposure but only minutely.

#### **4.12.2. Other Impacts**

No significant impacts are expected to result from the relatively short-term activities of construction, such as noise, solid waste, etc. Appendices IV and V contain procedures for dealing with these issues.

#### **4.13. Irreversible and Irretrievable Commitment of Resources**

The materials used for construction of the proposed facilities would be committed for the life of the facilities. Some materials, such as ceramic insulators and concrete foundations, may be irrevocably committed, but the metals used in equipment, conductors, and supporting steel structures could be recycled. The useful life of steel pole transmission structures is expected to be at least 60 years.

The rights-of-way used for the transmission lines would not be irreversibly committed and could be returned to other uses upon retirement of the line. In the interim, compatible uses of the right-of-way could continue.

Forest products and related wildlife which might have grown on the presently forested portions of the right-of-way would be lost for the life of the project. No locally or regionally significant lost forest or agricultural production would be expected.

#### **4.14. Unavoidable Adverse Effects**

As previously stated, clearing for this transmission line would result in the removal of less than 10 acres of forest. After completion of the transmission line, trees would not be permitted to grow within the right-of-way or to a determined height adjacent to the right-of-way which would endanger the transmission line.

Clearing and construction would result in the disruption of some wildlife, but no permanent habitat changes would occur except in the wooded areas previously described.

Any burning of cleared material would result in some, short-term air pollution.

Clearing, tree removal, and excavation for pole erection would result in a small amount of localized siltation.

Transmission line visibility would be minimized through the location and use of dark-colored structures; however, there would be some degree of visual effect on the landscape in the project area.

#### **4.15. Relationship Between Local Short-Term Uses of the Environment and Long-Term Productivity**

The construction and operation of the proposed transmission line would supply electricity to meet the loads present and expected in the western portion of Williamson County. This would be accomplished by a localized shift of a small amount of land to use for electric power transmission. If, during the useful life of the transmission line, it is no longer needed or technology renders it obsolete, it can be removed with relatively little difficulty. The land encumbered by the right-of-way could be returned to its previous use or used for other purposes.

The principal change in short-term use of the right-of-way would be the exclusion of trees and permanent structures. The amount of forest being lost is small, less than 10 acres within the right-of-way area, and areas removed from production are dispersed along the length of the line. The right-of-way cannot support building construction for the life of the project, but the social and economic benefits of the project should outweigh this small loss.

#### **4.16. Summary of TVA Commitments and Proposed Mitigation Measures**

To support the preceding conclusions TVA would commit to the following additional actions to avoid or mitigate possible environmental impacts:

##### Protection of Aquatic Resources

- All intermittent and perennial watercourse crossings would be designated as Level B, Protection of Important Permanent Streams, as outlined in Muncy (1999). This commitment restricts the cutting of trees near permanent streams to those meeting National Electric Safety Code and danger tree requirements and requires consultation with TVA Resource Stewardship staff to minimize the impact of stream crossings.
- Watercourses that convey only surface water during storm events (i.e., wet-weather conveyances or ephemeral streams) and that could be affected by the proposed project route would be protected by standard Best Management Practices (BMPs) as identified in Muncy (1999). These BMPs are designed to minimize erosion and subsequent sedimentation in streams.
- TVA stream bank stabilization experts would be consulted regarding how best to stabilize each watercourse crossing.
- TVA botanists would be consulted regarding recommendations on planting native, low growing deciduous and/or scrub/shrub vegetation on the stream banks to provide bank stabilization and a certain degree of canopy cover.
- TVA Transmission Power Supply maintenance organization would be notified of the two previous commitments requiring consultation with TVA experts, and informed that future maintenance activities are to minimize disturbance of any stream bank stabilization components or planted vegetation. In addition, a TVA aquatic ecologist would be requested to review future maintenance/sensitive area projects associated with the proposed line segment to help ensure that the bank stabilization and planted vegetation are not impacted by maintenance activities.
- A copy of the proposed project's Erosion and Sediment Control/BMP/Storm Water Control Plan (as discussed in Muncy, 1999) would be provided to TVA's Heritage staff one month prior to any clearing or construction activities.

##### General Best Management Practices for Clearing, Construction, and Maintenance

- TVA practices detailed in Appendices IV, V, VI and VII would be used during clearing, construction, and maintenance. EO 13112 directs all Federal agencies to prevent and control the introduction and spread of invasive species resulting from their activities. TVA would use reseeding mixes that are certified to be free of invasive, exotic plant seeds when replanting disturbed areas.

Protection of Historical Resources

- A Memorandum of Agreement between TVA and the Tennessee State Historic Preservation Officer would be completed and implementation begun prior to the commencement of construction of this project.
- Transmission line structures and associated hardware for this project would be painted or otherwise be colored "Franklin green," a mixture of black and green, to further minimize visual effects.